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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/977,274 | 10/16/2001 | Masato Fujinaga | 50099-184 | 1996 |

7590 06/08/2005

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| EXAMINER | |
|---|---|
| ANDUJAR, LEONARDO | |
| **ART UNIT** | **PAPER NUMBER** |
| 2826 | |

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**



Application Number: 09/977,274
Filing Date: October 16, 2001
Appellant(s): FUJINAGA, MASATO

Brian K. Seidleck, reg. No. 51,321
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 02/10/2005.

***(1) Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

***(2) Related Appeals and Interferences***

A statement identifying the related appeals and interferences that will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

***(3) Status of Claims***

The statement of the status of the claims contained in the brief is correct.

***(4) Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

***(5) Summary of Invention***

The summary of invention contained in the brief is correct.

***(6) Issues***

The appellant's statement of the issues in the brief is correct.

***(7) Grouping of Claims***

The rejection of claims 18-21, 23 and 24 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

***(8) Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

***(9) Prior Art of Record***

KR1999-73868 KR1999-73868 10-1999

***(10) Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18, 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by (KR1999-73868 cited by applicant).

Regarding claim 18, KR1999-73868 (*e.g.,* fig. 3) shows a high frequency semiconductor device comprising:

- A semiconductor substrate 100 having a main surface;
- A first wiring 108 provided over the main surface of the semiconductor substrate;
- A grounding conductor layer (112, 116) continuously covering a periphery of the first wiring with a first insulator 114 interposed therebetween in a section crossing a direction of extension of the first wiring and including a first portion 116 constituted by only one unit covering an upper surface and two side surfaces of the first wiring and a second portion 112 covering a bottom surface of the first wiring.

Regarding claim 20, KR1999-73868 shows that the grounding conductor layer includes a flat upper surface.

Regarding claim 24, KR1999-73868 shows that the portion of the insulator, which covers upper and side surfaces of the first wiring and is provided in contact with the grounding conductors layer, is formed of the same material.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 19, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over (KR1999-73868 cited by applicant).

Regarding claim 19, KR1999-73868 (*e.g.,* fig. 3) shows most aspects of the instant invention including a first wiring 108 provided over the main surface of a semiconductor substrate 100 and completely surrounded by a grounding conductor layer (112, 116). As shown in figure 3, the grounding conductor layer is connected to the substrate. KR1999-73868 does not disclose that the first wiring conductor layer 108 may comprise a second wiring layer. Therefore, KR1999-73868 does not show a second insulator interposed therebetween in a section crossing a direction of extension of the second wiring. However, this type of arrangement is considered to be a duplication of parts due to obtain a multiple effect (*e.g.,* greater transmission capacity). This limitation is considered to be an obvious modification of the high frequency

semiconductor device disclosed in the Prior Art. The multiplicity of parts is not considered an innovation over the prior art unless this duplication of part creates a synergistic combination or unexpected results. See St. Regis Paper Co. V. Bemis Co., Inc., 193 USPQ 8, 11 (7th Cir. 1977).

Regarding claim 21, KR1999-73868 suggests that the ground conductor layer continuously covers the periphery of the second wiring layer 108 in cooperation with the semiconductor substrate with a second insulator and the insulating film interposed therebetween in the section crossing a direction of extension of the second wiring.

Regarding claim 23, KR1999-73868 suggests that a portion of the second insulator, which covers the upper and side surfaces of the second wiring and is provided in contact with the grounding conductor layer, is formed of the same material.

***(11) Response to Argument***

Applicant argues that the prior art does not shows a ground conductor layer including a first portion constituted by only one unit covering an upper surface and two side surfaces of the first wiring and second portion covering a bottom surface of the first surface. Nonetheless, KR1999-73868 (*e.g.,* fig. 3) clearly shows grounding conductor layer (112, 116) including a first portion 116 constituted by only one unit covering an upper surface and two side surfaces of a first wiring 108 and a second portion 112 covering a bottom surface of the first wiring 108. The first portion 116 is considered to be only one unit because it is a continuous metal structure. In claims directed to a product the process of making the product is not relevant. Only the final structure is relevant.

Applicant argues that the rejection of claim 19 is based upon an unsupported generalization devoid of factual basis. Nevertheless, the rejection of claim 19 is based on an issue (i.e., multiplicity of parts) that has been previously decided by the courts. The multiplicity of parts is not considered an innovation over the prior art unless this duplication of part creates a synergistic combination or unexpected results. See St. Regis Paper Co. V. Bemis Co., Inc., 193 USPQ 8, 11 (7th Cir. 1977). It is respectfully noted that applicant did not provide factual evidence or an argument to support his/her position that the inclusion of a second wiring is not a merely duplication of parts. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the multiplicity of parts without obtaining a synergistic combination or unexpected results is within the knowledge generally available to one of ordinary skill in the art. If a prima facie case of obviousness is established, the burden shifts to the applicant to come forward with arguments and/or evidence to rebut the prima facie case. See, e.g., Dillon, *919 F.2d at 692, 16 USPQ2d at 1901*. Rebuttal evidence and arguments can be presented in the specification, *In re Soni, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995), by counsel, In re Chu, 66 F.3d 292, 299, 36 USPQ2d 1089, 1094-95 (Fed. Cir. 1995)*, or by way of an affidavit or declaration under 37 CFR 1.132, e.g., Soni, 54 F.3d at 750, 34

USPQ2d at 1687; In re Piasecki, 745 F.2d 1468, 1474, 223 USPQ 785, 789-90 (Fed. Cir. 1984). However, arguments of counsel cannot take the place of factually supported objective evidence. See, e.g., *In re Huang, 100 F.3d 135,139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); In re De Blauwe, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984).*

For the above reasons, it is believed that the rejections should be sustained.

An appeal conference was held on 04/26/2005 with Mr. Leonardo Andújar (Examiner of record), Mr. Olik Chaudhuri (Supervisory Patent Examiner), and Nathan J. Flynn (Supervisory Patent Examiner), as the conferees.

Respectfully submitted,

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La/LA
April 30, 2005

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